

Notice of Allowability

Application No.

10/798,606

Examiner

George L. Walton

Applicant(s)

SCHUSTER, MICHAEL J.

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview summary and the examiner's amendment.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 11 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 6/15/04
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael J. D'Aurelio on July 15, 2004.

The application has been amended as follows:

1. (Currently Amended) A toilet fill valve, comprising:
a water inlet;
a first water outlet configured to supply water to a toilet tank; and
a bowl fill valve having a bowl fill valve inlet and a bowl fill valve outlet, the bowl fill valve inlet being operatively coupled to the water inlet, the bowl fill valve being integrally molded integrated with and radially extending from a portion of a body of the toilet fill valve, and the bowl fill valve being configured to supply an adjustable flow of water out the bowl fill outlet for filling a toilet bowl during a flush cycle of a toilet.
2. (Currently Amended) The toilet fill valve of claim 1, further comprising:
an actuating arm coupled to a float, the actuating arm extending in an orthogonal direction relative to a longitudinal axis of the toilet fill valve; and
the bowl fill valve extending in an orthogonal direction relative to the longitudinal axis of the toilet fill valve, wherein the actuating arm is angularly radially offset relative to the bowl fill valve, thereby preventing an interference with the bowl fill valve and a translational stem extending from the float to a free end of the actuating arm.
3. (Original) The toilet fill valve of claim 1, wherein the bowl fill valve further comprises a number of biased positions.

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4. (Original) The toilet fill valve of claim 1, wherein the bowl fill valve is a type of valve selected from the group consisting of a ball valve, a gate valve, a globe valve, a plug valve, a diaphragm valve, a butterfly valve, a needle valve, a sliding gate, a quick turn valve, and a knife valve.

5. (Original) The toilet fill valve of claim 1, wherein the bowl fill valve is a ball valve.

6. (Original) The toilet fill valve of claim 1, wherein the bowl fill valve is a butterfly valve.

7. (Original) The toilet fill valve of claim 1, wherein the bowl fill valve is a needle valve

8. (Currently Amended) A toilet tank with an adjustable bowl fill water flow, comprising:

a toilet fill valve having a water inlet coupled to a water source outside of the toilet tank and a water outlet directing an flow of water into the toilet tank;

a bowl fill valve having a bowl fill valve inlet and a bowl fill valve outlet, the bowl fill valve inlet being operatively coupled to the water inlet, the bowl fill valve being integrally molded integrated with and radially extending from a portion of a body of the toilet fill valve;

a tube coupling the bowl fill valve outlet to an overflow tube of the toilet tank, wherein a flow of water into the overflow tube is directed to a toilet bowl; and

the bowl fill valve being configured to supply an adjustable flow of water out the bowl fill outlet through the tube and into the overflow tube for filling the toilet bowl during a flush cycle of a toilet, the bowl fill valve preventing a creation of a pressure head in the tube.

9. (Currently Amended) A method for adjusting a bowl fill water flow during a flush cycle in a toilet, comprising the steps of:

determining a water level in a toilet bowl when the toilet bowl is full of water;

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adjusting a bowl fill valve integrally molded integrated with and radially extending from a portion of a toilet fill valve in the toilet to a predefined position, thereby adjusting a flow of water that refills the toilet;

flushing the toilet;

determining if the flow of water into the toilet bowl is adequate to refill the toilet bowl during the flush cycle; and

repeating the steps of adjusting the bowl fill valve, flushing the toilet, and determining if the flow of water into the bowl is adequate to refill the toilet bowl until the toilet bowl is substantially filled during a flush cycle.

10. (Currently Amended) The toilet fill valve of claim 9, further comprising preventing a creation of a pressure head in a tube that is coupled between an outlet of the bowl fill valve and an overflow tube in the toilet by adjusting the bowl fill valve ~~integrated with the toilet fill valve.~~

Please make the following proposed corrections in the specification:

[0014] Referring next to FIG. 2, shown is a top view of the toilet fill valve 100 according to an embodiment of the present invention. In this respect, the actuating arm 129 of the bowl fill valve 100 is seen with respect to the bowl fill valve 109. The actuating arm 129 is coupled to the float by way of the translational stem 126 (FIG. 1). In this respect, the actuating arm 129 extends in an orthogonal direction relative to a longitudinal axis 133 of the toilet fill valve 100. The longitudinal axis 133 is centered in the toilet fill valve 100 along the length of the toilet fill valve 100. Also, the bowl fill valve 109 extends in an orthogonal direction relative to the longitudinal axis 133 of the toilet fill valve 100. In order to prevent interference between the bowl fill valve 109 and the translational stem 126 or the actuating arm 129, the actuating arm 129 is angularly radially offset relative to the bowl fill valve 109 as shown. In this respect, the translational stem 126 is coupled to the free end of the actuating arm 129. By virtue of the angular ~~radial~~ offset between the bowl fill valve 109 and the actuating arm 129, the operation of the bowl fill valve 109 does not interfere with the operation of the toilet fill valve 100 itself by virtue of the fact that the float 123 (FIG. 1) can move freely with the

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movement of the translational stem 126 in order for proper operation of the toilet fill valve 100.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George L. Walton whose telephone number is 703-308-2596. The examiner can normally be reached on M-F, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


George L. Walton
Primary Examiner
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GLW